

Claims

1. Method for decoding items of subtitling data, character-
ised by the steps:
 - 5 - retrieving (202) items of Character Referencing Data
(103, 203) that are related to corresponding parts of a
video or audio-visual data signal (101), which data items
(103, 203) describe sequences of characters as well as
information about where in pictures of said data signal
10 and/or when and/or how to make the referenced characters
visible using a display memory (207);
 - deriving (206) from said items of Character Referencing
Data (103, 203) items of Character Selecting Information
and Character Positioning Information;
 - 15 - reading (206) pixel data of said referenced characters as
designated by said items of Character Selection Informa-
tion from a font memory (208);
 - writing (206) said pixel data into said display memory
(207) as designated by said items of Character Position-
20 ing Information.
2. Method according to claim 1, wherein the following steps
are carried out before retrieving (202) said items of
Character Referencing Data (103, 203):
 - 25 - retrieving (202) items of Font Describing Data (102, 204)
related to corresponding ones of said items of Character
Referencing Data (103, 203);
 - writing (205) said items of Font Describing Data into
said font memory (208).
- 30 3. Method according to claim 1 or 2, wherein, after retriev-
ing said items of Character Referencing Data (103, 203),
the following steps are carried out:
 - checking whether or not said pixel data of said refer-
35 enced characters are already stored in said font memory
(208);

- if not true, retrieving (202) such items of Font Describing Data (102, 204) which contain said referenced characters;
 - writing said items of Font Describing Data into said font memory (208).
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4. Apparatus for decoding items of subtitling data, said apparatus including:
- means (202) for retrieving items of Character Referencing Data (103, 203) that are related to corresponding parts of a video or audio-visual data signal (101), which data items (103, 203) describe sequences of characters as well as information about where in pictures of said data signal and/or when and/or how to make the referenced characters visible using a display memory (207);
 - means (206) for:
 - deriving from said items of Character Referencing Data (103, 203) items of Character Selecting Information and Character Positioning Information;
 - reading pixel data of said referenced characters as designated by said items of Character Selection Information from a font memory (208);
 - writing said pixel data into said display memory (207) as designated by said items of Character Positioning Information.
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5. Apparatus according to claim 4, wherein said means (202) for retrieving, before retrieving said items of Character Referencing Data (103, 203), retrieve items of Font Describing Data (102, 204) related to corresponding ones of said items of Character Referencing Data (103, 203), said apparatus further including:
- means (205) for writing said items of Font Describing Data into said font memory (208).
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6. Apparatus according to claim 4 or 5, further including

means for checking, after retrieving said items of Character Referencing Data (103, 203), whether or not said pixel data of said referenced characters are already stored in said font memory (208), wherein, if not true, such items of Font Describing Data (102, 204) are retrieved that contain said referenced characters, and are written into said font memory (208).

7. Method for encoding subtitling data, characterised by the step:

- attaching to a video or audio-visual data signal (101) related subtitling data including items of Character Referencing Data (103, 203) and items of Font Describing Data (102, 204),
whereby said items of Character Referencing Data (103, 203) describe sequences of characters as well as information about where in pictures of said data signal and/or when and/or how to make the referenced characters visible using a display memory, said items of Character Referencing Data including items of Character Selecting Information and Character Positioning Information, wherein said items of Character Selection Information can be used in a subtitle decoder for reading pixel data of said referenced characters from a font memory and said items of Character Positioning Information can be used in said subtitle decoder for writing said pixel data into said display memory,
and whereby said items of Font Describing Data (102, 204) can be written in said subtitle decoder into said font memory for checking whether or not said pixel data of said referenced characters are already stored in said font memory and, if not true, retrieving such items of Font Describing Data (102, 204) which contain said referenced characters and writing said items of Font Describing Data into said font memory.

8. A data carrier containing a video or audio-visual data signal (101) and related subtitling data that are encoded using a method according to claim 7.